

Interconnect for Aerospace/Military applications

MIL-DTL-38999 Series I, II and III

Only Amphenol can provide an entire range of MIL-DTL-38999 connectors, including: MS qualified solder, firewall, composite, hermetic and breakaway shell styles. This subminiature connector series is ideal for today's high density, high performance electrical requirements.



MIL-C-26500

Amphenol provides MIL-C-26500 connector users with more MS qualified options than any other supplier. Available with bayonet or threaded coupling, and aluminum or stainless steel shells, in a variety of style and finish options. This front release style connector is ideal for applications requiring on-the-line maintenance. Hermetic versions are also available.

Matrix

Amphenol manufactures Matrix brand connectors qualified to Mil-C-5015, Mil-C-26482 and Mil-C-83723 standards. MIL-C-83723 Series III connectors are the leading industry choice for firewall and harsh environment applications. Qualified to all major aircraft specifications, EN2997, ESC10, ESC11 (scoop-proof), BACC63CM/CN and ASN--E044X. Also available to most aircraft engine manufacturer's specifications. An ideal choice for use temperatures up to 260°C.



Stores Management Type II Rail Launch

The MIL-STD-1760 Stores Management Connector System is designed for use on aircraft that carry rail launched missiles. The insert provides for a hybrid arrangement that has been used on the F-18, B-52, B-2 and SRAM II programs.

Backplane Assemblies

Amphenol is the leading manufacturer of custom backplane assemblies using high - density, ruggedized, board to backplane interconnects. Amphenol Backplane performs in the most demanding environments including commercial airliners, army helicopters, navy and air force fighters, C4I electronics, missiles, ground vehicles, and navy warships.



MIL-STD-1760 Weapons Release

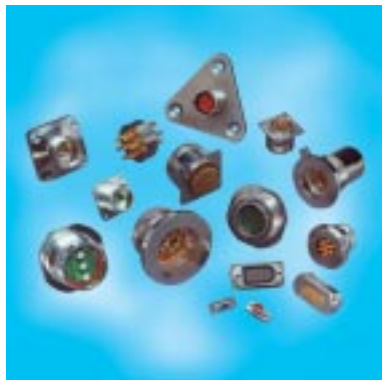
Amphenol offers a full-line of quick disconnect connectors. Our failsafe products are qualified to MS27661, D38999/29, /30 and /31 specifications. Coupling options include: MIL-C-26482 Series II - twist pull, MIL-C-5015 type proprietary push-pull, and others.

Hermetics

MIL-C-5015, MIL-C-26482

MIL-DTL-38999 Series I, II and III

The Hermetic product line supplied by Amphenol includes all the basic connector family lines, such as standard, miniature, and subminiature. Designed for use in the military and commercial market-place, these connectors have been manufactured for over 50 years, and incorporate a high pressure-capable insert to avoid leaking. Contact counts from 2 to 128 are available.



Astronaut Zero-G

The Astronaut Zero-G Connector is a handle-operated connector designed for use in space by suited astronauts. This connector has been used on the International Space Station, Apollo, Lunar Rover, and Skylab programs.

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Printed Circuit Board

Amphenol offers today's equipment designer a wide variety of contact options, including printed circuit board, wire wrap, coaxial, twinaxial, triaxial, first-mate-last-break, compliant pin, and high mating cycle options.



EMI Filter

Amphenol EMI/EMP protection connectors offer the versatility of standard connectors, but with EMI/EMP protection for sensitive circuits. Internal housing of EMI/EMP devices eliminates costly and bulky exterior discrete protection devices. Available in many sizes, styles, and arrangements, Amphenol filter connectors are inter-mountable and inter-mateable with standard Mil-Spec connectors.

Rectangular and Brush Contact

This high performance system is ideal for demanding applications, such as the M1A2 tank, the F22 fighter, high speed IC test equipment, global positioning satellite systems, and high reliability blood analysis equipment for the medical industry. MIL-C-55302 rectangular connectors with brush contacts provide extreme low mating & un-mating forces (1.5 oz/contact pair) with high durability (over 20,000 cycles). It is impervious to fretting corrosion or discontinuities due to vibration and shock, and has a current rating up to 5 amperes.



Ground Plane

Combining the best of both MIL-C-38999 and shielded contact technologies, Amphenol offers a wide range of "Ground Plane" connector options. Our capabilities include common contact-to-contact shield grounding for a variety of connector shell styles, materials and insert arrangements.

Fiber Optic & Cable Assemblies

Harsh environments require high reliability optical connectors, termini, cable assemblies, and back planes, for a broad range of applications, ranging from the international space station, fighter aircraft, battlefield communication networks, oil exploration, and LAN/WAN networks. The rugged multi-channel D38999 Series III connector incorporates the proven MIL-T-29504 family of termini into the popular MIL-DTL-38999 package, in aluminum, stainless steel or composite shell.



CTOS

The CTOS are Field Deployable Lens connectors, which have been developed for battlefield conditions and quickly deployable large capacity links. Incorporating expanded beam lens technology, the interface can be easily cleaned and can perform in harsh environments. This connector is available in 2, 4 and 8 channel configurations, and accommodates both single mode and multimode cables.

RNJ / RNJ OP

The RNJ are environmental rack and panel cylindrical connectors derived from the MIL-DTL-38999 series 1. They are used to connect electrical or optical devices between a moving unit (rack) and a fixed unit (panel), without any coupling/uncoupling device. The specific design of the RNJ ensures axial, angular and longitudinal realignments. The RNJOP is the optical version, providing 4 to 8 multimode channels.



Terminal Junction Modules

Series 1750 / 1765 / 1100 / 1174
For signal or power distribution in avionics systems. High density for size 22-20-16-12-10 contacts. A wide variety of contact layouts, to meet most requirements. Mixed layouts, & grounded versions with inserted components (diodes, resistors, micro relays) in environmentally sealed junctions. Reduce weight modules in composite rail. HL 103 and HL 105, JN1020 approved, and resistant to various aircraft fluids from -67°F / +347°F.

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MIS (Modular Interconnection System)

Modular, multi-contact, multi function rectangular connector in metallic or composite, shielded or standard. For signal, power, coax, triax and optical contacts. Qualified to EN 4165 spec. (Contacts are Military standard 39029). This System is ideally suited to Commercial or Military Avionics & C4I systems and missiles, where small size & reduced weight are paramount. Fitted on the most advanced helicopter and air force fighters.



1900 Series Rectangular to ASNE 0390 and EN 3545

All plastic, compact, rectangular high density for crimp, solder or right angled PCB contacts, and is ideal for a commercial aircraft environment. Available in AWG 22-20-16-12-10 to MIL C 39029/57 & 58 standard, mixed layout, coax and power versions that are either environmentally sealed or standard. Fixing screws provide 36 polarization options, and a D shaped shell for proper coupling. Easy snap-on cable clamp. Resistant to various aircraft fluids from -67°F / +347°F



Sockets for Hermetically Sealed Relays

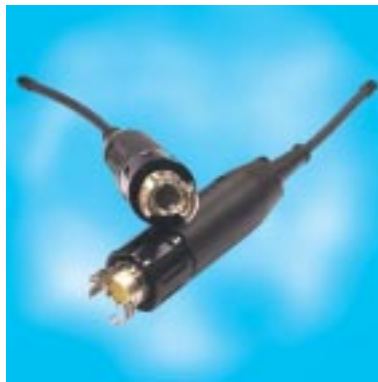
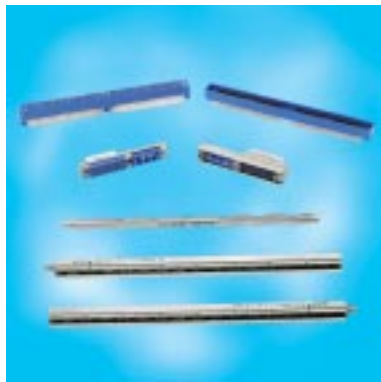
Available both in environmentally sealed or standard. Accepts 5 to 25 A relays of differing polarizations. Crimp or PCB solder socket contacts. Complies with MIL S 12883 / 40-41 and European commercial aircraft ASN E 0219/247/250/251 standards. Various types of fixings supplied together with socket, or as accessories.



SIHD, SIAL and Thermal Clamps

SIHD combines advanced thermal conductivity technology with grounding contacts to respond to problems with transients and cross talk. SIAL combines the benefits of SIHD with the modularity and the addition of power, coaxial contacts and optical termini.

A range of thermal clamps is available to ensure the thermal dissipation of circuit boards from heat sinks to the chassis. These are compatible with PCB connectors from all sources.



1720 Series Push Pull Locking and Fixing

Designed to European commercial aircraft Standards ABS 0364 and ABS 1019 for easy termination, installation and mating. All plastic connectors. No tools required for attaching to equipment. Available in size 5, 9, 10 or 26 crimp contacts. IP 66 Environmental grommet and interfacial seal. Provides connection for each passenger's reading lamp on commercial aircraft.

Bus Bars and Power Distribution Terminals

Bus bars are designed to feed AC three pole circuit breakers on all Airbus commercial aircraft. Each bus bar is made of a copper nickel core and an insulator, to use up to 3000 V, 50/60 Hz, and 250 Amps. Insulation resistance of more than 5000 MOhm. 3240 Series terminals ideal for power distribution in aircraft environments with current ratings of 10 - 125 or 250 Amp at 600VCA, dielectric over 5 KV.

Environmental Weatherproof Optical Connectors

These fiber optic connectors were developed for outdoor applications using proven shells, with high performance in different environments. They are waterproof, weatherproof (corrosion and UV resistant) and suitable for blind mate applications. They use standard termini, providing high reliability and cost effective design. Available in screw, bayonet and push-pull, in 2 and 4 channels, and they accommodate both single mode and multimode cables.

AXOS

The AXOS "Amphenol eXpanded beam Optical Small" is a hermaphroditic miniature rapid ramp coupling connector for indoor and outdoor communication systems. The flat protective window ensures easy cleaning and provide the best optical performance whatever the conditions. This connector is available in 2 and 4 channel configurations, and accommodates both single mode and multimode cables.